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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,418

06/24/2005

Riki Okamoto

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KENYON & KENYON LLP  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER

YEE, DEBORAH

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

11/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,418	<b>Applicant(s)</b> OKAMOTO ET AL.	
	<b>Examiner</b> Deborah Yee	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/2/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 to 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,290,784 ("Yasuhara").

4. Yasuhara in claims 1 to 10 of columns 16-18 discloses a hot rolled steel sheet composition with constituents whose wt% ranges overlap those recited by the claims; and such overlap in alloy wt% ranges establishes a prima facie case of obviousness because it would be obvious for one skilled in the art to select the claimed alloy wt% ranges over the broader disclosure of the prior art since the prior art teaches the same utility of using steel to make press work automotive components, and similar properties of high strength and high ductility, and similar microstructure comprising a main phase

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of ferrite with an average grain size of not less than 2  $\mu\text{m}$  but less than 4  $\mu\text{m}$  and second phase that can be bainite.

***Response to Arguments***

5. Applicant's arguments filed November 2, 2009 have been fully considered but they are not persuasive.

6. Applicant argued that the steel of Yasuhara is made by a different process than recited by the claims. More specifically, inventive steel is made by heating at high temperature higher than the dissolution temperature of  $\text{TiC}$  followed by cooling down to precipitate  $\text{TiC}$  dispersed in ferrite. In contrast, steel of Yasuhara is heated at a temperature lower than the dissolution temperature of  $\text{TiC}$  to promote a dynamic recrystallization of austenite. Therefore  $\text{TiC}$  exists in austenite, and  $\text{TiC}$  is definitely not promoted to precipitate in fine form in a ferritic phase because of a rapid cooling after a rolling.

7. In response to argument, regardless of how  $\text{TiC}$  is derived, Yasuhara still teaches a hot rolled steel sheet composition having ferrite as the main phase with grain size at 2 -4  $\mu\text{m}$  and bainite as a second phase together with  $\text{TiC}$  precipitated in structure. Since Applicant has not demonstrated (e.g. by comparative test data) how the  $\text{TiC}$  materially differs, then claims would not patentably distinguish over prior art. Note that in a product-by-process claim patentability is determined by the product per se and not its process of making. The burden falls to Applicant to show that any process steps associated with the claimed product results in a materially different product from those of the prior art because there is nothing in the record before the Examiner to

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reasonably conclude that claimed product differs in kind from those obtained by prior art.

8. Applicant argued that examples of Yasuhara do not contain Al and Si within the claimed ranges. It is the Examiner's position despite the fact that Yasuhara does not exemplify any specific example with Al and Si falling within the claimed Al and Si range, Yasuhara still teaches the general steel composition containing  $\leq 0.2\%$  Al and  $\leq 2\%$  Mn that overlap and teach portions of Applicant's range of 0.15 to 2.0% Al and  $\leq 0.25\%$  Si, respectively. Moreover, Applicant has not demonstrated (e.g. by comparative test data) that the more narrowly claimed Si and Al ranges are somehow critical and produce of new and unexpected results.

9. To distinguish claims over Yasuahra, it is recommended to amend Al range to recite a lower limit of 0.40%, support shown in example 1 in table 1-1 on page 18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on monday-friday 6:00 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Yee/  
Primary Examiner  
Art Unit 1793

/DY/